

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-10 (canceled).

11. (New) A device for supplying voltage to a heavy power consumer in a motor vehicle, comprising:

a generator that provides a controlled DC voltage for charging a battery and for supplying at least one consumer;

a circuit arrangement for connecting the heavy power consumer to one of the battery and the generator, wherein the circuit arrangement includes a first electronic component that is situated between the positive pole of the battery and the heavy power consumer, and at least two charge storage devices that are selectively connected to one another by a switching arrangement, and wherein the at least two charge storage devices are selectively connected to the heavy power consumer and the electronic component; and

a control device for controlling the operation of the switching arrangement.

12. (New) The device as recited in Claim 11, wherein the at least two charge storage devices are connected in series by selected switching of the switching arrangement by the control device when the heavy power consumer is activated, and wherein the switching arrangement includes two switches.

13. (New) The device as recited in Claim 12, wherein the at least two charge storage devices are connected in parallel by selected switching of the switching arrangement by the control device when one of: a) the heavy power consumer is

deactivated; and b) a starting process of the heavy power consumer is completed.

14. (New) The device as recited in Claim 13, wherein a transition from the series connection to the parallel connection of the at least two charge storage devices occurs in at least two steps.

15. (New) The device as recited in Claim 13, wherein a transition from the series connection to the parallel connection of the at least two charge storage devices takes place in a single continuous step.

16. (New) The device as recited in Claim 11, wherein the heavy power consumer is one of an electric auxiliary compressor, a piezoelectric actuator, an electro-hydraulic brake, and an electric power steering system.

17. (New) The device as recited in Claim 13, wherein the at least two charge storage devices are super capacitors.

18. (New) The device as recited in Claim 13, wherein the electronic component is one of a high current diode, an electronically controlled switch, and a linearly regulated switch.

19. (New) The device as recited in Claim 13, wherein the control device is one of a control unit for the vehicle electrical system, an engine controller, and a control unit for an electric auxiliary compressor, and wherein the control

device outputs triggering signals for operating the individual switches.

20. (New) A method for supplying voltage to a heavy power consumer in a motor vehicle, comprising:

providing, using a generator, a controlled DC voltage for charging a battery and for supplying at least one consumer;

selectively connecting, by a circuit arrangement, the heavy power consumer to one of the battery and the generator, wherein the circuit arrangement includes a first electronic component that is situated between the positive pole of the battery and the heavy power consumer, and at least two charge storage devices that are selectively connected to one another by a switching arrangement, and wherein the at least two charge storage devices are selectively connected to the heavy power consumer and the electronic component; and

controlling, using a control device, the operation of the switching arrangement, wherein the control device detects when the heavy power consumer is to be connected, and wherein the control device subsequently outputs appropriate triggering signals to the switching arrangement to ensure a required voltage supply for the heavy power consumer.